& Mumbai. Now, even private operators are offering PCO services to public. Earlier there were complaints that, when the local call rate was Re. 1 for 90 seconds pulse, the PCOs were overcharging the customer by collecting Rs. 2 and not returning the balance. So, to avoid this, both, the BSNL and the MTNL Delhi have decided to increase the local call charge to Rs. 2 with a pulse of 120 seconds. The idea behind is that the customer gets due value for his money and PCOs will not overcharge. We also give more incentives to PCOs. We are also increasing their commission to ensure that PCOs do not try to fleece customers. Sir, specific complaints are very rare. Most of the complaints are attended to by the Department or the operators when they go on check. If there is any specific complaint, instead of a general one, I assure the hon. Member that the Department will definitely take action, because it becomes easy for us to perform our duty.

डा॰ कुमकुम राय: सभापति महोदय, प्रश्न के भाग ''ग'' का उत्तर देते हुए मंत्री जी ने बताया है कि जो पीसीओ मालिक अनियमितताएं करते हुए पाये जाते हैं और बार-बार वार्निंग देने के बाद भी वह नहीं सुधरते हैं, तो उनका पीसीओ परमानेंटली डिसकनेक्ट कर दिया जाता है। मेरा प्रश्न आपके माध्यम से मंत्री जी से यह है कि कई बार उनके ऊपर करोड़ों और लाखों के बिल बकाया रह जाते हैं, ऐसे पीसीओ जो बंद कर दिये जाते हैं, उनका मामला लम्बा खिचता चला जाता है। मैं यह पूछना चाहती हूं कि जिला उपभोक्ता फोरम में ऐसे कितने मामले हैं? आपके टेलीफोन विभाग में भी ऐसे कितने मामले हैं? टेलीफोन विभाग की कितनी राशि ऐसे मामलों में लम्बित है?

SHRI DAYANIDHI MARAN: I don't have the information right now with me. I will send the information to the hon. Member.

*582 [The questioner (Shri Balwant Alias Bal Apte was absent for answer *vide* page 44].

Exploration of Space

*583. SHRI SHAHID SIDDIQUI: Will the PRIME MINISTER be pleased to state:

(a) what new projects are being planned for the exploration of Space during the next three years;

(b) whether there is any project to send a man to Space, if not, the reasons therefor;

(c) whether Government are satisfied with the progress made by Indian Scientists in the field of Space exploration and technology; and

(d) if so, the progress made to justify the money spent in this field?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) to (d) A statement is laid on the Table of the House.

Statement

Exploration of Space

(a) Two new projects are planned for the exploration of space during the next three years. They are CHANDRAYAAN-1 and ASTROSAT missions. Chandrayaan-1 is the first Indian unmanned mission to the Moon meant for the exploration of lunar surface and mineralogy. ASTROSAT is a multi-wavelength astronomical observatory in space for studies of the phenomena of variability in different types of stellar objects simultaneously covering a range of high-energy radiations from X-rays and gamma rays to far/near Ultraviolet (UV) along with observations in visible part of the spectrum.

(b) No, Sir. Manned space missions are not envisaged at the present juncture to meet the primary objective of Indian space programme, which is to achieve self reliance in development of satellites and launch vehicles technology and to utilise space technology for application programmes in communications and earth observation besides societal applications such as tele-education, tele-medicine, meteorology, disaster management support etc. The present status of advancement in space technology makes it possible to meet the above objectives using unmanned spacecraft. Also, the cost associated with manned missions is an order of magnitude higher and, at present, the gains expected from such missions do not justify high investments.

(c) Yes, Sir.

(d) Today IRS system with six spacecraft in orbit is providing multi spectral high-resolution imageries for various applications of resource survey and management on operational basis. The INSAT system of eight satellites in operation with about 150 transponders is providing operational services for broadcasting, television, communications and meteorological observations in addition to societal applications such as

tele-medicine, tele-education. Two launch vehicles namely PSLV and GSLV have been indigenously designed and developed for meeting the operational launch services of all IRS and two tonne class INSAT/GSAT satellites. Today, India is one among six nations in the world possessing the capability to build geostationary satellites and launch them into space with their own launch vehicle.

Money spent in this area has been effectively utilized in building the infrastructure, design and development of the above space systems in addition to delivery of the operational systems. The self-reliance achieved in technology and the successful application programmes besides the commercial gains in communication and remote sensing areas more than outweigh the investments made so far.

श्री शाहिद सिद्दिकी: सर, आज सबसे पहले मैं प्रधान मंत्री जी को, इस राष्ट्र को और ''इसरो'' के सारे साइंटिस्टों को बधाई देना चाहूंगा, जो उन्होंने सक्सेसफुल लांच किया है। मैं कुछ क्रिटिकल बातें ''इसरो'' के बारे में करना चाहता था, लेकिन मैं समझता हूं कि आज उस तरह के सवाल करने का मौका नहीं है। इसलिए मैं माननीय मंत्री जी से जानना चाहूंगा कि चन्द्रयान-1 का जो प्रोजेक्ट है, जिसको 2008 में लांच करने का प्लान है, वह क्या शैडयूल पर है? क्या वह सही दिशा में चल रहा है? उसमें कोई बाधा तो नहीं है? उसके बाद जो दूसरे प्लानेट्स पर भेजने के लिए हमारा कार्यक्रम अनाउंस हुआ था, उस पर हम किस दिशा में जा रहे हैं?

†[شری شاہد صدیقی : سر، آج سب سے پہلے میں پردھان منتری جی کو، اس راشٹر کو اور ''اسرو'' کے سارے سائنٹسٹوں کو بدھائی دینا چاہوں گا، جوانہوں نے کامیابی کے ساتھ لانچ لیا ہے۔ میں کچھ کریٹیکل باتیں، اسرو کے بارے میں کرنا چاہتا تھا، لیکن میں سمجھتا ہوں کہ آج اس طرح کے سوال کرنے کا موقع نہیں ہے۔ اس لئے میں مانے منتری جی سے جاننا چاہوں گا کہ چندریان-1 کا جو پراجکٹ ہے، جس کو ۲۰۰۸ میں لانچ کرنے کا پلان ہے، وہ کیا شیڈول پر ہے؟ کیا وہ صحیح دشا میں چل رہا ہے؟ اس میں کوئی رکاوٹ تو نہیں ہے؟ اس کے بعد جو دوسرے پلانٹ پر بھیجنے کے لئے ہمارا کارے کرم اناؤنس ہوا تھا، اس پر ہم کس دشا میں جا رہے ہیں؟]

SHRI PRITHVIRAJ CHAVAN: Sir, the Lunar Mission, CHANDRAYAAN-1, is on schedule. It will be launched within the timeframe of 2007-08. There are no concrete plans to send spacecrafts to other planets.

†Transliteration in Urdu Script.

श्री शाहिद सिद्दिकी: महोदय, इस तरह की रिपोर्ट्स आयी थीं कि सुनामी वार्निंग सिस्टम बनाने का, लॉंच करने का इसरो का प्लान है। उस डायरैक्शन में क्या हुआ है? दूसरा, टेलीमैडीसिन नैटवर्क के लिए अलग से, सैपरेट सैटेलाइट लांच करने का ऐलान किया गया था, उस प्रोजैक्ट की करेंट पोजीशन क्या है? क्या हम उम्मीद करें कि वह जल्दी हो पाएगा?

†[شری شاہد صدیقی : مہودے، اس طرح کی رپورٹس آئی تھیں کہ سنامی وارننگ سسٹم بنانے کا، لانچ کرنے کا اسرو کا پلان ہے۔ اس ڈائرکشن میں کیا ہوا ہے؟ دوسرا، ٹیلی میڈیسن نیٹورک کے لئے الگ سے، سیپریٹ سیٹلائٹ لانچ کرنے کا اعلان کیا گیا تھا، اس پراجکٹ کی کرنٹ پوزیشن کیا ہے؟ کیا ہم امید کریں کہ وہ جلدی ہو پائے گا۔]

SHRI PRITHVIRAJ CHAVAN: Sir, we have already launched the telemedicine project in many States. The existing satellites are being used for the telemedicine project. There is no special separate satellite for telemedicine project at the moment.

श्री शाहिद सिद्दिकी: इसरो के चेयरमैन ने अनाउंस किया था कि इसके लिए सैपरेट सैटेलाइट लॉंच किया जाएगा और सुनामी वार्निंग के बारे में ...(व्यवधान)...

†[شری شاہد صدیقی : اسرو کے چیرمین نے اناؤنس کیا تھا کہ اس کے لئے سیپریٹ سیٹلائٹ لانچ کیا جائے گا اور سنامی وارننگ کے بارے میں ...مداخلت...]

श्री सभापति: आप बैठिए। ...(व्यवधान)...

श्री पृथ्वीराज चव्हाण: सर, सुनामी वार्निंग सिस्टम में स्पेस का कोई डायरेक्ट एप्लीकेशन नहीं है। सबके साथ हम सहयोग कर रहे हैं।

श्री शाहिद सिद्दिकी: इसरो के चेयरमैन ने कहा था कि हम सिस्टम लॉंच करने वाले हैं।

†[شری شاہد صدیقی : اسرو کے چیرمین نے کہا تھا کہ ہم سسٹم لانچ کرنے والے ہیں۔]

श्री पृथ्वीराज चव्हाण: हमारी जो अर्थ ऑब्जर्वेशन सैटेलाइट आईआरएस सीरीज की है, उसका सारा जो डाटा है, वह सुनामी वार्निंग के लिए काम आता है। ऑलरेडी हमारे पास जो ...(व्यवधान)...

श्री शाहिद सिद्दिकी: फिर आप वार्निंग क्यों नहीं दे पाए?

†[شری شاہد صدیقی : پھر آپ وارننگ کیوں نہیں دے پائے؟]

†Transliteration in Urdu Script.

श्री पृथ्वीराज चव्हाण: जो 6 सैटलाइट हमारे पास हैं, उससे इमेजरी लेकर मेटिरीलॉजिकल डिपार्टमेंट को देते हैं।

SHRI V. NARAYANASAMI: Hon. Chairman, Sir, our scientists, by launching the satellite today, have proved that they are doing a very good job in the field of space research. It is a landmark in space research. The hon. Minister, in his reply, has mentioned that there is no programme for sending a man to the space. The United States has done it and other countries are also attempting to do it. I would like to know from the hon. Minister whether the Government is thinking of sending a man to the space in future, say, after 9-10 years. The second part of my question is, some other countries have also manufactured their spacecrafts and satellites, but they do not have launching pads. Some countries, like the United States, are providing their launching pads for use to the countries, like Japan, China and such other countries. I would like to know from the hon. Minister whether India is also going to provide its launching pad for use by such countries.

SHRI PRITHVIRAJ CHAVAN: Sir, as I said, the CHANDRAYAAN-1 Mission is a moon observation mission. It is not a manned mission at all. We have no plan to send a man to the moon, as of now, because we think the expenses will not be in commensurate with benefits.

As far as the second part of the question is concerned, India has already offered its launch capabilities to all the countries that want to launch their own satellite. We are offering to take payloads of some countries. We have already got projects to take satellites from some of our friendly countries. We have a special cooperation, the *antriksha* cooperation, which is specifically doing the job of marketing the Indian launch vehicle capabilities to other countries that want to launch their own satellites.

PROF. P.J. KURIAN: Sir, the hon. Minister, in his reply, has said that a manned space flight is not contemplated because the expenditure is not commensurate with the gains. What I would like to know from the hon. Minister is, how does he calculate gains with regard to a manned space flight? Is it simply on monetary terms? Sir, sending a man to the space is a matter of pride for the nation. Today, we have achieved such a great success. The ISRO scientists have got acclamation not only from India, but also from all over the world.

Therefore, the gains from a manned space flight should be calculated in the form of pride and the international repute that we will be achieving. In view of that, I would like to know whether the hon. Prime Minister will reconsider the question of not contemplating a manned space flight, and will also examine whether a manned space flight is possible. I know it is possible for our scientists. Why does he not plan for a manned space flight? I would like the hon. Prime Minister to answer this question.

SHRI PRITHVIRAJ CHAVAN: Sir, these Chandrayan and Astrosat experiments are in the areas of space science. We already have other series of satellites for remote sensing and for communication. So, we are now attempting to gain capability in deep space communication, deep launch capability, precise navigation, and all that. It is not that we have ruled out, at a future date, a man mission. All I said was, at this stage, we are not contemplating a man mission.

SHRI P.G. NARAYANAN: Mr. Chairman, Sir, will the Prime Minister inform the House of any plan of Space Department to enhance the capacity of the Sriharikota Station, which is rendering an excellent service in this field? I want to know how many countries, including the payload countries, have so far utilised our launching pad in Sriharikota.

SHRI PRITHVIRAJ CHAVAN: Sir, the Satish Dhavan Space Centre in Sriharikota, from where the satellite was launched today, is a world-class facility. Only yesterday, our hon. Rashtrapatiji dedicated the second launch site in the Sriharikota complex. So, the Sriharikota complex is being expanded. At the moment, no foreign satellite has been launched from India.

SHRI JAIRAM RAMESH: Sir, whilst rejoicing in the achievements of our space scientists, I would like to put to the hon. Minister a very simple question about the utilisation of all the capabilities that we are developing. Specifically, we have developed remote sensing satellites and we have launched an Edusat. On the ground, how are these being utilised? Is the information from these satellites being actually utilised? Other than signing MOUs between ISRO and the various State Governments, what do we have to show for it?

SHRI PRITHVIRAJ CHAVAN: Sir, I think, the achievements of ISRO and the Department of Space are enviable. We are one of the largest

countries in the world with the largest capabilities. We have seven space aircraft as of now. ...*(Interruptions)*...

SHRI JAIRAM RAMESH: That is not my question.

SHRI PRITHVIRAJ CHAVAN: I am coming to that. By monitoring Earth observation and India observation, we are getting very high quality maps of India, high resolution maps of our terrain, and other countries, which are being sold commercially. They are being used very effectively in planning our being sold commercially. We have got eight communication satellites. We have 150 transponders. So, we should be proud of this achievement. All the telecommunication that we have and the television programmes that are being broadcast are using this satellite. The Earth observation role is a very important role. There is the Natural Resource Management System. The backbone of that System is our IRS Satellites. And we are doing a very good work on that.

SHRIMATI N.P. DURGA: I would like to know from the hon. Minister whether it is true that the Department of Space has entered into an agreement with the European Space Agency to assist in our Space Based Navigation System. If, yes, how this navigation system helps in strengthening the national security scenario?

SHRI PRITHVIRAJ CHAVAN: Sir, we are discussing and participating in the GALILEO Programme, which is a Satellite Navigation Programme. I think, the collaboration in this field will, definitely, go further. We are playing a very important role along with the European Space Agency to participate in this programme.

MR. CHAIRMAN: Mr Anand Sharma. This is the last supplementary.

SHRI ANAND SHARMA: Thank you, Sir. Mr. Chairman, Sir, it is a very proud day for the country as you and the hon. Prime Minister have informed us of this new achievement of ISRO. The hon. Minister has just now informed about the satellites and also their capabilities. I would like to know (a) whether India is prepared to share the data, which we are collecting, with the developing countries in Asia, Africa and Latin America to help them, not commercially, but as a gift to those who are looking upto us. And secondly, at what stage is the utilisation of the EDUSAT, which was gifted by the hon. President to the African continent and what are the results?

SHRI PRITHVIRAJ CHAVAN: Sir, as I said, the space imagery is being sold commercially across the world, but we have a special programme to enable African countries. It is on non-commercial basis to help our neighbours in Africa, to develop space capability, and, particularly, to utilise communications and Remote Sensing capabilities. We will definitely help all our neighbours who are in need of our space technology to develop their own space capability and communications.

Setting up of Electronic Telephone Exchanges in Tamil Nadu

*584. SHRI E.M. SUDARSANA NATCHIAPPAN: Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

(a) the details of electronic telephone exchange set up in Tamil Nadu during the last three years;

(b) the details of the electronic telephone exchanges proposed to be set up during 2005-06; and

(c) the details of the other steps being taken to improve the communication facility in Tamil Nadu?

THE MINISTER OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (SHRI DAYANIDHI MARAN): (a) to (c): A statement is laid on the Table of the House.

Statement

Setting Electronic Telephone Exchanges in Tamil Nadu

(a) The details of electronic telephone exchanges set up in Tamil Nadu during the last three years is given in Statement I, II & III respectively (*See* below)

(b) The details of electronic telephone exchanges proposed to be set up during 2005-06 is given in statement IV (*See* below)

(c) The details of other steps being taken to improve the communication facility in Tamil Nadu are as follows:

(i) Introduction of more RSUs (Remote Switching Units)/DLCs (Digital Loop Carrier) to reduce the cable length resulting in reduction of faults due to cables.